

**Meeting Notes
Community Review Group
9-18-03**

ATTENDEES

Community Review Group: Kathie Joyner, Elizabeth Black, Jim Snow, Phil Simpson, Ken Hotard, Bill Mitzelfeld, Terry Rodrigue, Don Mock, Alison Richards, Jerry Lee, Peter Gowen, Charlie Manlove, and Joe Howard

Others: City of Boulder – Bob Harberg, Alan Taylor; Decision-making Systems – Molly Tayer; URS - Scott Randall, Carol Anderson, Steve Rogers

OPENING

Molly Tayer presented the agenda and asked CRG members and City of Boulder and URS staff to introduce themselves.

KEY ISSUE #1 FLOODPLAIN MAPPING

To start of the discussion on *Technical Memorandum #3: Floodplain Mapping and Regulations*, Alan Taylor gave a PowerPoint presentation on “Floodplain Studies: Floodplain Mapping Study Updates & Risk Based Mapping Assessments.”

Discussion on 10-year cycle for mapping studies

Q: How much is the City spending now on floodplain mapping each year?

A: Average between \$50 to 100K per year However, the South Boulder Creek study cost \$350K .

Q: Does the City get money from UDFCD and FEMA?

A: This is the first year that we have gotten money from FEMA.

Comment: Funding: put larger dollar amount toward effort in early years of implementation, get caught up, and then go to a flat-fee, annually apportioned to the effort.

Q: Is there a benefit to updating at different times? Part of the process should be the order that updates are done. Some are higher priority than others. Also, does it make sense to do some drainageways at the same time?

A: Yes. Fourmile and Wonderland Creeks are good examples of this.

Comment: I was under the impression that FEMA was given several million dollars to update floodplain studies.

Response: \$125K for South Boulder Creek came from FEMA.

Comment: Regarding how to identify and target where to focus, developing/developed areas should be done first and probably more frequently.

Comment: Some of our drainageways need to be studied more often than others. It sounds like the City is recommending doing all 13 every 10 years.

Q: I am assuming that this study establishes regulatory floodplain. Would there be similar requirements for developers?

A: Developers often do just a section of the drainageway, but City must look at the whole picture.

Comment: Still accept incremental (development-driven) analysis. Comment regarding the value of piecemeal mapping studies.

Comment: Need to see costs for models suggested in the Tech Memo. Piecemeal mapping is not appropriate. Need to change language to show that occasionally piecemeal mapping is ok.

Comment: Happy to see that maps include changes in Fourmile and Wonderland Creeks.

Response: Those changes have not yet been adopted because there has not been Quality Assurance/Quality Control (QA/QC).

Comment: But we do need to have the best available information in the Plan (relates to maps not yet adopted, but remapping the City has on hand).

Comment: Need to finish the projects in process - Fourmile, South Boulder, and Gregory Canyon Creeks – first.

Comment: Need to show the assumptions used to perform the study on the maps.

Comment: Provide information on maps regarding extreme incidents (e.g., Barker Dam break) which is available on State emergency maps.

Discussion on floodplain risk assessments

Comment: Could be used to help prioritize where to do remapping and how to set up that cycle.

Q: If no other communities currently do this, what is the added benefit for Boulder?

A: Risk assessment really shows the problems. It goes beyond boundaries and tells you what's going on within the boundary

Q: How would this information be integrated and used across the organization?

A: It would help us with our notification techniques and provide an opportunity to see where mitigation is most needed and most cost-effective.

Q: Does the City have programs in place to assess what you've learned from risk assessment?

A: Yes. We couldn't have done this as effectively 10 years ago, but now we have GIS tools that allow us to do this effectively.

Q: Demonstrate what this buys us. What is the magnitude of benefit of this additional information? What is the different between general understanding versus going this further step? How precise does it get? How much are we going to benefit?

A: It is a valuable addition to help us make decisions. Decision regarding flood mitigation expenditures are based primarily on the relative risk of the flood hazards to life and property. A better understanding of these risks would allow expenditures to be targeted at mitigation efforts to reduce the threat to life and property. The City has used this approach in the past by looking at the depth and velocity of flood waters and the vulnerability of various structures based on their structural characteristics.

Comment: It would be nice to have this information on floodplain mapping with benchmarking.

Response: The City is working on a project that will do this. We have commissioned aerial mapping and the first contour interval has tremendous uses.

Comment: Gregory Creek needs to be added in here as creek that has been restudied. Three years ago, money was spent on mapping Gregory Creek.

Response: I agree. We need to finish up mapping those areas that we have updated in the process (i.e., Fourmile, South Boulder, and Gregory Canyon Creeks)

Comment: I would like to see a list of assumptions that goes with each map – the limitations to all these models.

Q: Has there been any attempt to have risk assessment influence in the permitting process?

A: It helps us to assess the best way to approach each particular property.

Q: What would I as a citizen consider using floodplain mapping for – a Barker Dam failure?

A: Barker Dam is not in the City of Boulder. However, that kind of information could be made available to the public. The State Engineer's Office has that information.

KEY ISSUE #2 FLOODPLAIN REGULATIONS

Alan Taylor gave a PowerPoint presentation on "Floodplain Regulations."

Q: Why do we want to be part of the National Flood Insurance Program (NFIP)? Doesn't that enable development in floodplains?

A: Yes, but we originally joined so that residents in the floodplains would be able to get loans.

Discussion on increasing minimum flood protection for freeboard and setback

Q: Does adopting a 100-foot setback get at problem you are attempting to solve? What about geography with steep terrain?

Comment: It is alarmist to say that the City is changing from a 100-year floodplain to 500-year floodplain. We need to see what the difference is and whose properties will be affected. Strongly suggest that you communicate with people who will be affected before you release this recommendation.

Response: Good idea. Moving from the 100-year floodplain to the 500-year adds about 2 ft. of freeboard which adds an extra level of protection.

Comment: Setbacks should be taken off the list because they are not associated with impacts.

Comment: Regarding freeboard, be consistent with other communities.

Q: Is anyone else using 2 ft.?

A: Not really.

Q: Why would the City need to require 2-ft. freeboard for already floodproofed structures?

Comment: If there's a way that you could put data behind these recommendations (e.g., cost/benefit analysis about adopting 2-ft. freeboard or fire suppression), that would be helpful. The recommendation that the City establish lower density zoning seems like down-zoning and I'm not sure about changing zoning.

Q: What part of the City is covered by the 500-year floodplain?

A: 100-year floodplain:	8,000 acres	3,800 structures
500-year floodplain:	15,000 acres	5,300 structures

Comment: Attracted to 500-year protection, yet aware that a 500-year flood event will behave differently in different parts of the city. It would be different in Martin Acres than it would be at 55th St.

Response: Federal government would like to tighten up the regulations.

Discussion on revising regulations for critical structures

Comment: Likes the idea of 500-year for critical facilities like schools. Parents need to know dry ways to get to the schools when there is flooding.

Comment: How to do this and make standards consistent between FEMA, Urban Drainage, and the City of Boulder.

Comment: Yes! Especially schools and hospitals.

Q: Is there a firm definition for critical facilities?

A: They are any publicly-owned structure.

Comment: Need to better break information regarding critical facilities down – look at things that need to keep operating in the event of a flood, and building/spaces that can be evacuated.

Discussion on requiring specific flood mitigation items for flood-prone structures

Comment: Floodproofing makes sense downtown, but it is harder for single family homeowners.

Consensus: Cost of fire sprinklers and elevation requirements. Need to look at how and when these are required – make sure cost of adding makes sense for scale of structure – case by case.

Q: TDRs – clustering, wondering if you’ve thought about height variance options.

A: Great addition!

Comment: My cautionary instincts tell me that these new requirements are going to make people unhappy because they are going to be regulated when they haven’t been in past. More and more people will fall under these regulations. I would suggest tying new requirements to real measured data – do not add new arbitrary requirements to old arbitrary requirements.

Comment: Problem with requirement for “fire suppression” and required changes to structures in 100-year floodplain.

Comment: Regarding the suggestion that you could “floodproof basements in areas where shallow flooding could occur with 12 hours notice,” - there is no area like this in Boulder.

Comment: Likes the suggestions regarding conveyance zones; it fits in with a good neighbor policy.

Comment: There will be more impact on small property owners rather than large property owners such as the University.

Q: How does the small property owner go about proving their case for what they want to do? Will they need to hire an engineer?

A: Sometimes they will need to hire an engineer; other times the City staff can help.

Comment: Floodproofing basements is a marvelous idea.

Q: Could area residents elect to accept a certain amount of shallow flooding and not have creek way re-engineered? (Githens Acres) Neighbors floodproof and absorb problem?

Q: Is there a way to use cost/benefit analysis to determine areas where you floodproof versus mitigate the floodway?

Discussion on the recommendation that no rise be allowed within the 100-year floodplain

Comment: No rise policy would be very difficult to establish absolute standard and will have a profound impact on a number of properties.

Comment: No rise concept sounds good, but how in reality is this done?

Comment: City will need more staff and money to do this work.

Q: Can you create a data set regarding what is out there that would apply – areas where this could be a problem?

Comment: Consider practical, political will concerns – if you double the number of people in the community who will be regulated.

Comment: Keep in mind life safety – ensure that people have good information to protect themselves.

CLOSING

Bob Harberg told the group that he had met with the WRAB about the previous Tech Memos that the CRG had addressed – Water Quality and Stormwater Drainage, and that there had not been a lot of comment about or input from them on those topics.

The next meeting will focus on Emergency Preparedness, Public Education, and the Flood Insurance Program. It will be Thursday, October 16, from 3 to 5:30 p.m. at the East Boulder Senior Center.